

either to immature or abortive specimens, or to plants judged by me to be var. *typica* rather than var. *attenuata*, and are included (RHODORA 37: 234) in my table under the former variety.

I recognize that there is overlapping between *A. virginica* and *A. neodioica* in some characteristics, but since I am aware of an equal amount of overlapping between *A. fallax* and *A. Parlinii* (particularly in the southern and western portions of their range), *A. neglecta* and *A. petaloidea* (chiefly in Wisconsin), *A. petaloidea* and *A. neodioica* (throughout the north central states), and *A. Parlinii* and *A. Brainerdii* (in central New York) I feel that, in the interests of consistency, the reduction of *A. virginica* to a variety calls for a similar reduction of *A. Parlinii*, *A. petaloidea*, *A. Brainerdii*, and probably other species now recognized in the floras of Eastern North America.

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## NOTES ON VERNONIA

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IN organizing the North American material of the genus *Vernonia* at the Gray Herbarium, the following two changes in rank seem necessary; the first, from a purely taxonomic point of view, and the second from both taxonomic and nomenclatorial considerations.

*VERNONIA SCABERRIMA* Nutt. var. **pulchella** (Small), comb. nov. *V. pulchella* Small, Bull. Torrey Club, xxv. 145 (1898).

In 1898 Small established *Vernonia pulchella* as a species, defining it as related to *V. scaberrima* Nutt. and adding "It is, however, more robust in habit, and has larger serrate leaves which are destitute of the peculiar base characteristic of *Vernonia scaberrima*. The tips of the involucre bracts are more slender and less rigid than those of its relative."

The type specimen, collected by Small "on sand hills bordering the Altamaha River swamps in Liberty county, Georgia, in July 1895," is a plant with leaves varying in character of the base from acute to definitely amplexicaul. Surely this plant, obviously related to *V. scaberrima* Nutt. in all its characters, which presents in its leaf-character a series clearly including the *V. scaberrima* type (sub-amplexicaul base), in large proportion, cannot justifiably be separated as a distinct species.

Comparison of the leaves of Small's type, kindly loaned by Dr. Gleason, with fragments of *V. scaberrima* from the herbarium of Dr. Baldwin shows close similarity, a lower leaf of Baldwin's specimen conforming almost exactly to Small's description; and a note with the above fragments in Dr. Asa Gray's handwriting indicates that the lowest leaves were "broadish." Therefore, judging from the size of the leaves found, the lowest leaves were certainly comparable in size to those of Small's specimen. Another specimen of *V. scaberrima* in the Gray Herbarium, from the Herbarium of the Academy of Natural Sciences in Philadelphia, which was examined for the Synoptical Flora of North America, has leaves almost identical with the upper leaves of a specimen identified as *V. pulchella* by H. A. Gleason and collected by A. H. Curtiss in Oct. 1880 in "dry pine barrens, Altamaha River, Georgia," obviously close to the type locality. The right-hand specimen on sheet No. 161 and an unnumbered sheet collected at the same time and place by Curtiss conform in leaf-character to Small's type; but, while the specimen of one sheet has involucre bracts typical of Small's *V. pulchella*, the other two on sheet No. 161 have the involucre bracts "filiformly terminated as in *V. noveboracensis*" which is in accordance with Nuttall's description of *V. scaberrima* Nutt. Gen. ii. 134 (1818). Since there can be no clear differentiation on the basis of leaf-character it seems justifiable to designate Small's type and specimens close to it in both character of leaves and involucre bracts as a variety of *V. scaberrima* which differs from the species only in the involucre. The bracts of the varietal type are definitely recurved, whereas in the specific forms they are erect or spreading and, if recurved, never to the extent or with the regularity of the varietal type.

VERNONIA BALDWINI Torr., var. **interior** (Small), comb. nov. *V. interior* Small, Bull. Torr. Bot. Club xxvii. 279 (1900).

From a nomenclatorial point of view the status of the two forms, *Vernonia Baldwinii* Torr. and *V. interior* Small, has long been uncertain, because of absolute violation of rules of priority by various students of the group.

*Vernonia Baldwinii* was established as a species by Torrey, Ann. Lyc. N. Y. ii 211 (1827); *V. interior* was established by Small seventy-three years later in Bull. Torrey Club xxvii. 279 (1900). Since Small, various students have felt that these two forms are close enough taxonomically so that specific rank is unjustifiable for both. The only

valid procedure, therefore, is to reduce the later species to a variety of the earlier, leading to the combination *V. Baldwini* Torr., var. *interior* (Small). However, this step was not taken directly. In 1902 Mackenzie and Bush (Man. Fl. Jackson Co. Mo. 190) reduced *V. Baldwini* Torr. to a variety of *V. interior* Small, producing the combination *V. interior* Small var. *Baldwini* (Torr.) Mackenzie and Bush.

In 1906 Gleason (A Revision of the North American Vernonieae, Bull. N. Y. Bot. Gard. iv. 153. (1906) stated that, nomenclatorially, the procedure of Mackenzie and Bush was invalid and that the name should be *V. Baldwini interior*, but he also maintained that, based on taxonomic characters and geographical distribution *V. Baldwini* was only an eastern form of the more widely distributed *V. interior*, and, as such, should be maintained as the variety, regardless of nomenclatorial ruling. Gleason's mere statement of the proper combination does not constitute publication, because, according to international ruling "A name of a taxonomic group is not validly published unless it is definitely accepted by the author who publishes it. . . ." (Art. 37 ter. from Rec. Syn. 41, 1930; and Brit. Prop., Art. 44, p. 16, 1929. See also Sprague, Journ. Bot. lxxiv. 75 (1936).) Definitely, Dr. Gleason rejects the proper combination in the very act of stating it, and in the same paper applies his description of the form in question to the name *V. interior Baldwini*.

From a taxonomic standpoint the two forms in question are closely related. Dr. Robinson, in his treatment of the genus for Gray's Manual (7th edition), noted, after his discussion of *V. Baldwini*: "*V. interior* Small, though sometimes distinguishable by its less squarrose mostly purple-tinged bracts, does not appear satisfactorily separable."

The chief character for differentiation between the two forms lies in the involucre bracts. In *V. Baldwini* Torr. essentially all the bracts are squarrose to reflexed, in *V. interior* Small only a few bracts of any given involucre are squarrose or reflexed. The distinction between the two forms has been proven by a close study of herbarium specimens. Dr. Gleason in his latest study of the group maintains that the bracts of *V. Baldwini* are pubescent and resinous within the squarrose or reflexed tips, and that the bracts of *V. interior* are glabrous within. However, an examination of herbarium material proved that in most cases where any involucre bracts of specimens of *V. interior* were reflexed there was a certain amount of pubescence or resin

within. This difference, then, is also one of degree. Therefore, since from a taxonomic standpoint one species is a variety of the other, according to nomenclatorial ruling the name of the variety should be established as *Vernonia Baldwinii* Torr. var. *interior* (Small).

In conclusion I should like to express my appreciation to Professor M. L. Fernald for his interest and helpful suggestions throughout this study.

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HYPERICUM MUTILUM L., var. **latisepalum**, var. nov., sepalis late lanceolatis vel oblongis foliaceis.—Florida to Texas. TYPE: low grounds, Duval Co., Florida, June–August, *A. H. Curtiss*, no. 264\* (distributed as *H. mutilum*, var. *gymnanthum*) in Gray Herb.

A characteristic southern extreme. Typical *Hypericum mutilum* L., as noted for me by Mr. C. A. Weatherby upon study of the type (*Clayton*, no. 232) in the summer of 1935 and as further demonstrated by a photograph of it secured by him through Mr. J. Ramsbottom, is the wide-spread plant with sepals linear or narrowly lanceolate, only one or two of them exceptionally broader. In var. *latisepalum* all the sepals are dilated.—M. L. FERNALD, Gray Herbarium.

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